

(19) World Intellectual Property  
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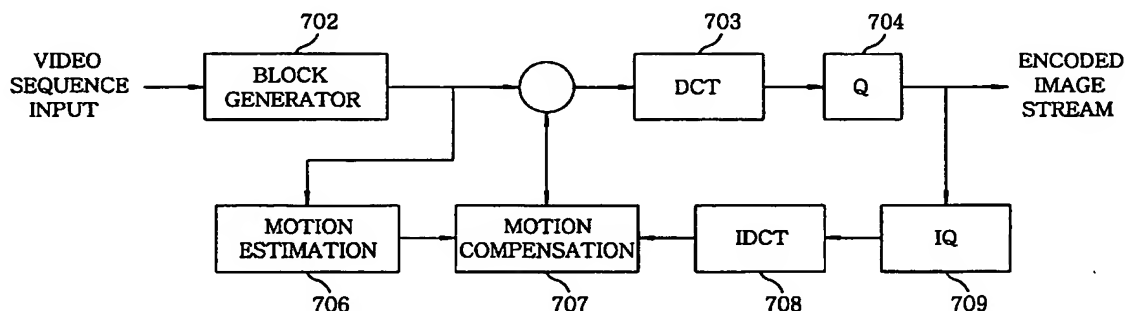
(43) International Publication Date  
6 May 2004 (06.05.2004)

PCT

(10) International Publication Number  
**WO 2004/039082 A1**

- (51) International Patent Classification<sup>7</sup>: **H04N 7/36** (KR). AHN, Chieteuk [KR/KR]; Expo Apt. 208-603, Jeonmin-dong,, Yuseong-gu, Daejeon 305-761 (KR).
- (21) International Application Number: PCT/KR2003/002104 (74) Agent: JANG, Seong Ku; 17th Fl., KEC Building, 275-7, Yangjae-dong, Seocho-ku, Seoul 137-130 (KR).
- (22) International Filing Date: 13 October 2003 (13.10.2003) (81) Designated States (*national*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:  
10-2002-0064520 22 October 2002 (22.10.2002) KR
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- (84) Designated States (*regional*): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).
- Published:  
— with international search report
- For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.*

(54) Title: METHOD AND APPARATUS FOR MOTION ESTIMATION USING ADAPTIVE SEARCH PATTERN FOR VIDEO SEQUENCE COMPRESSION



(57) Abstract: In a method for motion estimation using adaptive patterns in a video sequence compression system, an initial search pattern located at a center of a search window in a block of a video frame is determined. A location of a minimum block distortion measure (BDM) is searched in the initial search pattern. A horizontal search pattern for functioning on the search window is determined in the horizontal direction to search a location of a minimum BDM in the horizontal search pattern. A vertical search pattern for operating on the search window is determined in the vertical direction to search a location of a minimum BDM in the vertical search pattern. The location of the minimum BDM in each pattern is designated to be a motion vector. A search pattern to be used in a subsequent searching stage is determined based on the location of the minimum BDM in each pattern.